IN THE CLAIMS

1-15. Canceled.

16. (New) A method of manufacturing a semiconductor device, comprising the steps of:

providing a lead frame having a front face, a back face opposed of the front face, a tub and a plurality of leads arranged around the tub wherein a back face of the tub is etched off and each of the leads is thicker than the tub;

providing a semiconductor chip having a principal face, a back face and a plurality of electrodes formed on the principal face;

bonding the back face of the semiconductor chip on the front face of the tub;

electrically connecting the plurality of electrodes with the plurality of leads via a plurality of wires, respectively;

providing a molding die having an upper part and a lower part wherein the lower part has a cavity;

arranging the lead frame between the upper part and the lower part as the bonded semiconductor chip is positioned in the cavity of the lower part and the back face of the tub is facing the upper part; and

after the arranging step, injecting a resin in the cavity for sealing the semiconductor chip, the tub, the plurality of

wires, and a part of each of the plurality of leads in the resin,

wherein the back face of the tub is entirely sealed by the resin, and

wherein a part of the resin which covers the back face of the tub is thinner than the leads.

17. (New) A method of manufacturing a semiconductor device, comprising the steps of:

providing a lead frame having a front face, a back face opposed of the front face, a tub and a plurality of leads arranged around the tub wherein a back face of the tub is etched off and each of the leads is thicker than the tub;

providing a semiconductor chip having a principal face, a back face and a plurality of electrodes formed on the principal face;

bonding the back face of the semiconductor chip on the front face of the tub;

electrically connecting the plurality of electrodes with the plurality of leads via a plurality of wires, respectively;

providing a molding die having an upper part and a lower part wherein the lower part has a cavity;

arranging the lead frame between the upper part and the lower part as the bonded semiconductor chip is positioned in

the cavity of the lower part and the back face of the tub is facing the upper part; and

after the arranging step, injecting a resin in the cavity for sealing the semiconductor chip, the tub, the plurality of wires, and a part of each of the plurality of leads in the resin,

wherein the back face of the tub is entirely sealed by the resin, and

wherein a front face of the tub is smaller than the back face of the semiconductor chip.

18. (New) A method of manufacturing a semiconductor device according to claim 17, wherein the lead frame has a frame portion and tub suspending leads, the plurality of leads are supported with the frame portion, and the tub is supported with the frame portion via the tub suspending leads.

19. (New) A method of manufacturing a semiconductor device according to claim 18, wherein the tub suspending leads are connected to the tub under the back face of the semiconductor chip.

20. (New) A method of manufacturing a semiconductor device according to claim 19, wherein back faces of the tub

suspending leads at portions that connect the tub are etched off.

21. (New) A method of manufacturing a semiconductor device according to claim 20, wherein back faces of the tub suspending leads at portions under the back face of the semiconductor chip are etched off.

22. (New) A method of manufacturing a semiconductor device according to claim 21, wherein, in the resin injecting step, back faces of the tub suspending leads at portions of etched off are sealed by the resin.

23. (New) A method of manufacturing a semiconductor device according to claim 22, wherein, in the resin injecting step, injecting the resin between front faces of the tub suspending leads and the back face of the semiconductor chip under the back face of the semiconductor chip.

24. (New) A method of manufacturing a semiconductor device according to claim 23, wherein a part of the resin which covers the back face of the tub is thinner than the leads.

25. (New) A method of manufacturing a semiconductor device according to claim 24, wherein a part of the resin which covers the back faces of the tub suspending leads is thinner than the leads.